



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/579,115	05/11/2006	Tokinobu Mitasaki	5259-000063/US/NP	1335
27572	7590	10/08/2009		
HARNESS, DICKEY & PIERCE, P.L.C.				
P.O. BOX 828				
BLOOMFIELD HILLS, MI 48303				
EXAMINER				
CHANG, AUDREY Y				
ART UNIT		PAPER NUMBER		
2872				
MAIL DATE		DELIVERY MODE		
10/08/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/579,115

Applicant(s)

MITASAKI ET AL.

Examiner

Audrey Y. Chang

Art Unit

2872

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 July 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21, 26, 32, 33, 38 and 39 is/are pending in the application.
- 4a) Of the above claim(s) 26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 21, 32, 33, 38 and 39 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on **August 4, 2009** has been entered.
2. This Office Action is also in response to applicant's amendment filed on **July 1, 2009**, which has been entered into the file.
3. By this amendment, the applicant has amended claim 39.
4. Claim 26 is withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected group, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on July 16, 2008.
5. Claims 21, 32-33, 38 and 39 remain pending in this application.
6. The rejection to claim 39 under 35 USC 112, second paragraph, set forth in the previous Office Action is withdrawn in response to applicant's amendment.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
8. **Claims 21, 32, 33, and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Japanese patent issued to Ishihara (JP 2003-050534).**

Ishihara teaches, (with regard to amended claims 21 and 32), a *laminated holographic medium* that can be utilized as authentication device for copyright protection wherein the laminated holographic medium is produced by the method including the steps of providing an *identification information recording medium* that is formed by combining a *recording layer* (20B, Figure 8) which implicitly has an exposed surface, a *gap layer* (3C), a *first core layer* (2B), a *first diffraction grating layer* provided in the core layer (2B) for recording data and a *first cladding layer* (3B). Ishihara teaches the information recorded in the recording layer is in the form of recording mark transmittance or non-transmittance of light indicating the information data in accordance with a presence of a hole or a *degree* of remittance of the light, (please see the masked pattern for recording layer 20B). Ishihara further teaches that the laminated holographic medium is combined with a *recording medium* (323) including a second cladding layer (3), a second core layer and a second diffraction grating layer formed in the second core layer. It appears that the forming of the identification information recording medium including the step of forming information data on the recording layer (as shown in Figure 6) is *independent and separated* from the formation of the *recording medium* (323) including the *second* diffraction grating layer. It is noted that the recording medium (323) is formed by the steps as shown in Figure 3. The information recorded in recording layer (20B) can be done in a separated step (as shown in Figure 6) *before* it is combined with the recording medium (323). It is either inherently true or obvious modification to one skilled in the art to form the laminated holographic medium by combining the identification information recording medium and the recording medium since they are made by different manufacture processes, to make two separately and then combine the two would reduce the interference between the two processes.

This reference has met all the limitations of the claims. It does not teach explicitly that the recording medium (323) with the second cladding layer, second core layer and second diffraction grating layer is ROM type recording medium. However since the recording medium includes the essentially the

Art Unit: 2872

same elements as a ROM type medium, the recording medium disclosed therefore includes the claimed ROM type recording medium. This reference also does not teach that the core layer and the diffraction grating layer are separate layers. However to either make them the same layer or different layers are considered to obvious matters of design choice to one skilled in the art, since them both function the same.

With regard to claims 33 and 38, Ishihara teaches laminated holographic medium that can serve as authentication device is formed by the methods disclosed and described above for claims 21 and 32.

9. Claim 39 is rejected under 35 U.S.C. 103(a) as being unpatentable over the Japanese patent issued to Ishihara (JP 2003-050534), as applied to claim 21 and 38 above, and further in view of the patent issued to Ramapujam et al (PN. 6,801,348).

The laminated holographic medium taught by Ishihara as described for claim 21 above has met all the limitations of the claim.

With regard to claim 39, Ishihara does not teach explicitly to have a reflection layer that is provided in the order of the first diffraction grating layer, the recording layer and the reflection layer. Ramapujam et al in the same field of endeavor teaches a waveguide hologram medium where in the reflection mode, a reflection layer or mirror (8, Figure 2A) is provided in the order of the reflection layer (8), the recording layer (24) and the first diffraction grating layer (12). It would then have been obvious to one skilled in the art to apply the teachings of Ramapujam et al to add a mirror or reflection layer for the benefit of making the laminated holographic medium also in a reflection mode so that it satisfies the specific application requirement.

Response to Arguments

10. Applicant's arguments filed on July 1, 2009 have been fully considered but they are not persuasive. The newly amended and newly submitted claims have been fully considered and they are rejected for the reasons stated above.

11. In response to applicant's arguments which state that the instant application teaches that the recording layer with exposed surface, which means a recording being done, before the combination with the ROM type recording medium while the Ishihara reference does not teach such explicitly, the examiner respectfully disagrees. As shown in Figure 6 of Ishihara reference, the information being recorded in the recording layer (20B) is **before** the combination with the recording medium (323, Figure 8). The recording medium (323) can be formed by the separate and different production method as Figure 3. The recording layer (20B) and the recording medium (323) after the recordings of each layer/medium is combined to form the laminated hologram medium as shown in Figure 8. Both Figures 2 and Figure 6 of Ishihara reference discloses explicitly that the recording in the recording layer (20) is done *before* forming the laminate.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Audrey Y. Chang whose telephone number is 571-272-2309. The examiner can normally be reached on Monday-Friday (9:00-4:30), alternative Mondays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephone B. Allen can be reached on 571-272-2434. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Audrey Y. Chang, Ph.D.

*/Audrey Y. Chang/
Primary Examiner, Art Unit 2872*